

5 MANUFACTURE OF MODERN FIREARMS	Page 1 of 11
Division of Forensic Science FIREARM/TOOLMARK TRAINING MANUAL	Amendment Designator:
	Effective Date: 13 May 2003
<p style="text-align: center;">5 MANUFACTURE OF MODERN FIREARMS</p> <p>5.1 Assignments</p> <p>5.1.1 Numerous techniques are used in the manufacture of modern firearms. Research in detail these processes and set these out in your notes. Include but do not restrict your study to the following machining methods:</p> <ul style="list-style-type: none"> • Shaping • Planning • Drilling • Reaming • Turning • Boring • Milling-include both face milling and peripheral (slab) milling broaching • Shaping • Planning • Drilling • Reaming • Turning • Boring • Milling-include both face milling and peripheral (slab) milling broaching <p><i>(Use Training Assignment #6 to complete this objective.)</i></p> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div data-bbox="342 1108 609 1140">_____ Training Officer</div> <div data-bbox="1107 1108 1240 1140">_____ Date</div> </div> <p>5.1.2 Demonstrate knowledge of the basic nomenclature of handguns, rifles, and shotguns</p> <ul style="list-style-type: none"> • Include but do not restrict the study, to the following: breech face, breech bolt, bolt, bolt face • Extractor, ejector, firing pin, rifling, barrel, lands, grooves, ramp, magazine, clip, ejection port, receiver • Point out these parts in several handguns, rifles and shotguns as applicable • Discuss the manufacturing techniques used to fabricate and finish each part • Note the machining marks on each part • Point out any "<i>mark of abuse</i>" which could contribute to the uniqueness of each part • Identify areas that machining marks might "<i>carry over</i>" to another firearm <p><i>(Use Training Assignment #7 to complete this objective.)</i></p> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div data-bbox="342 1640 609 1671">_____ Training Officer</div> <div data-bbox="1107 1640 1240 1671">_____ Date</div> </div> <p>5.1.3 Research in detail the following rifling techniques:</p> <ul style="list-style-type: none"> • Broach • Button • Hammer forging • Hook method • Scrape method 	

5 MANUFACTURE OF MODERN FIREARMS	Page 2 of 11
Division of Forensic Science FIREARM/TOOLMARK TRAINING MANUAL	Amendment Designator:
	Effective Date: 13 May 2003
<div data-bbox="344 296 451 359"> <ul style="list-style-type: none"> • ECM • EDM </div> <div data-bbox="344 417 1058 453"><i>(Use Training Assignment #8 to complete this objective.)</i></div> <div data-bbox="344 506 610 541"> <div>_____</div> <div>Training Officer</div> </div> <div data-bbox="1107 506 1240 541"> <div>_____</div> <div>Date</div> </div> <div data-bbox="246 571 1511 634"> <div>5.1.4</div> <div>Obtain broaches and buttons for study from the section training materials. Determine the difference between barrels, which have been buttoned, rifled and those, which have been broached rifled.</div> </div> <div data-bbox="344 661 1058 697"><i>(Use Training Assignment #8 to complete this objective.)</i></div> <div data-bbox="344 749 610 785"> <div>_____</div> <div>Training Officer</div> </div> <div data-bbox="1107 749 1240 785"> <div>_____</div> <div>Date</div> </div> <div data-bbox="246 844 1533 879"> <div>5.1.5</div> <div>Discuss and define the following terms as they relate to firearm manufacture or firearms identification.</div> </div> <div data-bbox="344 909 553 1167"> <ul style="list-style-type: none"> • Chambering • Crowning • Ballizing • Bore slugging • Forcing cone • Bore • Choke • Choke tubes </div> <div data-bbox="344 1194 1058 1230"><i>(Use Training Assignment #8 to complete this objective.)</i></div> <div data-bbox="344 1283 610 1318"> <div>_____</div> <div>Training Officer</div> </div> <div data-bbox="1107 1283 1240 1318"> <div>_____</div> <div>Date</div> </div> <div data-bbox="246 1348 1477 1411"> <div>5.1.6</div> <div>Research the history and current significance of proof marks as they relate to the manufacture of firearms. Discuss this with the Training Officer.</div> </div> <div data-bbox="344 1438 1058 1474"><i>(Use Training Assignment #8 to complete this objective.)</i></div> <div data-bbox="344 1526 610 1562"> <div>_____</div> <div>Training Officer</div> </div> <div data-bbox="1107 1526 1240 1562"> <div>_____</div> <div>Date</div> </div> <div data-bbox="212 1621 1520 1808"> <div>5.1.7</div> <div>Visit the manufacturing facilities of at least six firearms and/or barrel manufacturers such as Wilson barrels, Ruger, Smith and Wesson, Mossberg, Marlin and US Repeating Arms. Record notes in the notebook on each visit and produce a written report of the visit for the Firearm Section files and an oral report for Firearm Section members. Particular emphasis should be placed on manufacturing and rifling techniques used by each manufacturer, noting methods and procedures which leave unique manufacturing toolmarks on firearm parts which, in turn, produce individual microscopic marks on bullets, cartridge cases and shotshell casings.</div> </div>	

5 MANUFACTURE OF MODERN FIREARMS	Page 3 of 11
Division of Forensic Science FIREARM/TOOLMARK TRAINING MANUAL	Amendment Designator:
	Effective Date: 13 May 2003
<p>Coordinate these visits with the Training Officer.</p> <p>_____</p> <p>Training Officer</p> <p>_____</p> <p>Date</p> <p>5.2 Reference Materials Modern Firearms Development and Operating Systems</p> <p>The following reference materials serve several purposes:</p> <ul style="list-style-type: none"> • To provide a wider range of additional resources • To provide reference materials for future use • To gain additional in depth knowledge of a particular subject area <p>Other references in this category should be make to the notes at the end of this listing</p> <p>5.2.1 Books</p> <p>Association of Firearm and Tool Mark Examiners Standardization Committee, <u>Glossary of the Association of Firearm and Tool Mark Examiners</u> (Appendix F, Firearm Ignition Systems), 3d edition, Available Business Printing, Inc., Chicago, 1994.</p> <p>Brownell, F.R., <u>Encyclopedia of Modern Firearms</u>, Brownell, 1959.</p> <p>Chinn, G.M., <u>The Machine Gun</u>, Volumes I-IV, U.S. Government Printing Office, 1951-1955.</p> <p>Ezzel, E.C., <u>Handguns of the World</u>, Barnes and Noble Books, New York, 1993.</p> <p>---. <u>Small Arms of the World</u>, Barnes and Noble Books, New York, 1993.</p> <p>Hatcher, J.S., <u>Hatchers Notebook</u></p> <p>Hobart, F.W., <u>Pictorial History of the Submachine Gun</u>, Scribners, 1975.</p> <p>Hogg, I.V., <u>Pistols of the World</u>, Fortress Publications, 1978,</p> <p>---. <u>Modern Small Arms</u>, Book Sales Inc., Edison, N.J., 1994.</p> <p>Janes Information Group, <u>Jane's Infantry Weapons</u>, London, current edition.</p> <p>Johnson, M.M., <u>Automatic Arms: Their History, Development and Use</u>, W. Morrow & Co., New York, 1941.</p> <p>Johnson, G.B., and Lockhoven, H.B., <u>International Armament</u>, Volumes I-II, International Small Arms Publishers, Cologne, 1965.</p> <p>Keith, E., <u>Shotguns</u>, Stackpole and Heck, 1950.</p> <p>Mueller and Olson, <u>Shooters Bible, Small Arms Lexicon and Concise Encyclopedia</u></p> <p>Murtz, H.A., ed., <u>The Gun Digest Book of Exploded Long Gun Drawings</u>, DBI Books, Inc., Northbrook, IL, 1993.</p>	

5 MANUFACTURE OF MODERN FIREARMS	Page 4 of 11
Division of Forensic Science FIREARM/TOOLMARK TRAINING MANUAL	Amendment Designator:
	Effective Date: 13 May 2003
<p>---. <u>The Gun Digest Book of Exploded Handgun Drawings</u>, DBI Books, Inc., Northbrook, IL, 1992.</p> <p>Nelson, T.B., and Lockhoven, H.B., <u>The Worlds Submachine Guns</u>, International Small Arms Publishers, Cologne, 1963.</p> <p>Nelson, T.B., and Musgrove, D., <u>The Worlds Assault Rifles and Automatic Carbines</u>, TBN Enterprises, 1968.</p> <p><u>NRA Fact Book</u>, 3rd edition, National Rifle Association, Fairfax, VA, 1989.</p> <p>Petzal, D.E., <u>The Encyclopedia of Sporting Arms</u>, Facts on File, Inc., New York, 1991.</p> <p>Roberts, J.B., ed., <u>Firearms Assembly, the NRA Guide to Pistols and Revolvers</u>, NRA, Fairfax, VA, 1993.</p> <p>---. <u>Firearms Assembly, the NRA Guide to Rifles and Shotguns</u>, NRA, Fairfax, VA, 1993.</p> <p>Smith, W.H.B., <u>Small Arms of the World</u>, Stackpole Books, Harrisburg, PA, 1973.</p> <p>---. <u>Book of Pistols and Revolvers</u>, 7th edition, Stackpole Books, Harrisburg, PA, 1968.</p> <p>Smith & Smith, <u>The Book of Rifles</u></p> <p>Wirnsberger, G., <u>The Standard Directory of Proof Marks</u>, Blacksmith Corporation, Chino Valley, AZ.</p> <p>Wood, J.B., <u>Firearms Assembly/Disassembly - Part I: Automatic Pistols</u>, DBI Books, Northbrook, IL, 1990.</p> <p>---. <u>Firearms Assembly/Disassembly - Part II: Revolvers</u>, DBI Books, Northbrook, IL, 1990.</p> <p>---. <u>Firearms Assembly/Disassembly - Part III: Rimfire Rifles</u>, DBI Books, Northbrook, IL, 1994.</p> <p>---. <u>Firearms Assembly/Disassembly - Part IV: Centerfire Rifles</u>, DBI Books, Northbrook, IL, 1991.</p> <p>---. <u>Firearms Assembly/Disassembly - Part V: Shotguns</u>, DBI Books, Northbrook, IL, 1992.</p> <p>---. <u>Firearms Assembly/Disassembly - Part VI: Law Enforcement Weapons</u>, DBI Books, Northbrook, IL, 1981.</p> <p>5.2.2 AFTE Journal</p> <p>Ball, P., "Iraqi Tariq Pistol (7.65mm)," 1993; 25(2): 128-129.</p> <p>Bell, P.D., and Mikko, D.M., "Iraqi Model 74 Semiautomatic Pistol," 1992; 24(1) 23-27.</p> <p>Berg, S.O., "Firearms Safety Design Origins and the Firearms," 1996; 28(4): 211-221.</p> <p>---. "Gas Handling, Containment, Deflection and Venting for Bolt Action Rifles," 1992; 24(4): 375-380.</p> <p>---. "History of Remington Slide Action Shotguns," 1988; 20(3): 296-299.</p> <p>---. "History of Remington Slide Action Shotguns," 1989; 21(2) :453-457.</p> <p>---. "History of Revolver Safeties," 1982; 14(4): 29.</p>	

5 MANUFACTURE OF MODERN FIREARMS	Page 5 of 11
Division of Forensic Science FIREARM/TOOLMARK TRAINING MANUAL	Amendment Designator:
	Effective Date: 13 May 2003
<p>---. "History of Revolver Safeties," 1989; 21(2): 309-313.</p> <p>---. "History of the Derringer Pistol," 1985; 17(3): 91.</p> <p>---. "Lever Action Firearms Safeties," 1988; 20(1): 64-71.</p> <p>---. "Magazine Safeties: Important Safety Design," 1993; 25(4): 301-307.</p> <p>---. "Rohm RG Industries Firearms and Safeties," 1986; 18(2):72.</p> <p>---. "Safety Design: Remington Semiautomatic shotguns," 1989; 21(3): 496-499.</p> <p>Boss, G., "Number One: AK-47 the Most Popular Gun in the World," 1995; 27(3): 220-221.</p> <p>Chenow, R.W., "Bauer .25 Caliber Stainless Steel Semiautomatic Pistol," 1976; 8(4): 20.</p> <p>---. "Mendoza Model K 62 Single Shot Pistol," 1980; 12(2): 28.</p> <p>Dodson, R.V., and Stengel, R.F., "American Derringer," 1992; 24(1): 63-64.</p> <p>Dujanovich, M.B., "Heckler & Koch 9x19mm Firearms," 1995; 27(4): 297-302.</p> <p>---. "Navy Arms Model TU90 Semiautomatic Pistol," 1994; 26(2): 121-126.</p> <p>Fournier, R.J., and Lemmer, J.T., "Type Sugiura: Oriental 32 ACP Pistol," 1985; 17(2): 38.</p> <p>Freeman, R.A., "M11/Nine and KG 99 Closed Bolt Semiautomatic Pistols," 1985; 7(2): 92.</p> <p>Garland, P.V., "Glock 17 Pistol," 1987; 19(2): 178-180.</p> <p>---. "SATA Semiautomatic Pistol," 1970; 2(7): 23.</p> <p>---. "SWD, Inc. Model II Semiautomatic Pistol," 1988; 20(4): 460-461.</p> <p>---. "Taurus Model 58S Semiautomatic Pistol," 1988; 20(4): 459.</p> <p>Garland, P.V., and Lutz, M., "USAF Rifle/SMG,.221 Cal," 1971; 3(1):24.</p> <p>Gieszl, R., "Bersa 380 Semiautomatic Pistols," 1991; 23(3): 862-866.</p> <p>Gieszl, R., Wolslagel, P., and Nordhoff, T., "Stallard Arms Model JS 9mm Semiautomatic Pistol," 1990; 22(3): 299-302.</p> <p>Goodman, R., Santora, D., and Trochum, T., "Kahr K9," 1996; 28(3): 166-167.</p> <p>Hawkins, R.R., "Davis Industries Model D-25 Derringer," 1985; 17(2): 77.</p> <p>Heflin, T.F., "Marlin 30 Caliber Machine Gun," 1988; 20(2): 204-205.</p> <p>Hughes, D.R., "Book Review: The History and Development of the M16 Rifle and Its Cartridge," 1991; 23(3): 798.</p> <p>Johnson, T.D., and Matty, W., "Arcadia Machine and Tool: Notes on AMT Firearms," 1986; 18(3): 69.</p>	

5 MANUFACTURE OF MODERN FIREARMS	Page 6 of 11
Division of Forensic Science	Amendment Designator:
FIREARM/TOOLMARK TRAINING MANUAL	Effective Date: 13 May 2003
<p>Kreiser, M.J., "45-70 Caliber Century Revolver," 1983; 15(2): 19.</p> <p>---. "AMT Back-Up Pistol Manufacturer Marking Information," 1984; 16(3): 20.</p> <p>---. "Information on Taurus History," 1982; 14(3): 9.</p> <p>Laskowski, G.E., "American Industries Calico M-100 & M-100P 22 Long Rifle Carbine and Pistol," 1988; 20(2): 131-134.</p> <p>Levine, R.T., "Davis Industries Derringers," 1990; 22(3): 310-314.</p> <p>Lutz, M.C., "Smoothbore 38 Special Derringer: Davis Industries Model D38," 1996; 28(3): 174-176.</p> <p>---. "Central Kentucky Arms Semiautomatic Rifle," 1983; 15(4): 40.</p> <p>---. "Jennings Bryco 59 Semiautomatic Pistol," 1995; 27(2): 130-132.</p> <p>Maruoka, R.K., "Beretta Model 92 Compact L," 1997; 29(1): 14-15.</p> <p>---. "French Mas Rifle," 1995; 27(1):17-19.</p> <p>Matty, B., and Dougherty, P., "Sedco Industries Model SP-22 Pistol," 1990; 22(2): 195-198.</p> <p>Mauer, C.C., "Rohm Model 38T Double Action Revolver," 1970; 2(3): 25.</p> <p>McBrayer, W.S., "Smith & Wesson Model SW40F," 1994; 26(4): 297-298.</p> <p>Mikko, D., "Ceska Zbrojoka (CZ) Model 50 Semiautomatic Pistol," 1993; 25(4): 264-265.</p> <p>Moorehead, C.A., and Mauer, R., "AMT Back Up 9mm Kurz (380 ACP) Auto Loading Pistol," 1985; 17(2): 97.</p> <p>Nielson, F. I., "Heckler & Koch P7 (PSP)," 1981; 13(4): 37.</p> <p>Nordhoff, T.J., "Lorcin 25 ACP Caliber Pistol," 1989; 21(4): 399-400.</p> <p>---. "Grendel Semiautomatic Pistol," 1989; 21(4); 609.</p> <p>---. "Wyoming Arms Parker 10mm S.S. Pistol," 1990; 22(2): 191-193.</p> <p>Stanton, R.B., "Bryco Arms Semiautomatic Pistol," 1990; 22(2): 194.</p> <p>Stauffer, J.C., ". 38 S&W American Bulldog (Belgium)," 1973; 5(5): 8.</p> <p>---. "Feather Model AT-9 Semiautomatic Carbine," 1990; 22(3): 333.</p> <p>---. "MKA 9mm Semiautomatic Carbine," 1991; 23(2): 658.</p> <p>Schubert, K.H., "Technical Note on the Grendel P-30 Pistol," 1993, 25(2): 108-109.</p> <p>Sojat, J.G. and Hart, R.P., "Heckler & Koch Model HK-4 Pistol," 1973, 5(2): 19.</p> <p>Stengel, R.F., and Dodson, R., "Rohm 41 Magum Model 57 Revolver, 1990; 22(4): 444-445.</p>	

5 MANUFACTURE OF MODERN FIREARMS	Page 7 of 11
Division of Forensic Science	Amendment Designator:
FIREARM/TOOLMARK TRAINING MANUAL	Effective Date: 13 May 2003
<p>Stone, R.S., "Sites Spectre 9mm Semiautomatic Pistol," 1991; 23(4): 1000-1002.</p> <p>Templin, R.H., "Jennings, Model J-22 Semiautomatic Pistol Information," 1987; 19(1) 18.</p> <p>---. "H&R Military Training Rifle," 1985; 17(2): 95.</p> <p>Thorpe, J.C., "Information on the S.W.D., Inc. SMG Production," 1984; 16(3): 17.</p> <p>Trumble, C. "Ortgies Pocket Pistols," 1997; 29(1): 87-92.</p> <p>---. "Ruger's Answer to the MP 5," 1997; 29(1): 80-86.</p> <p>Thompson, E., "Ares 9mm Folding Machine Gun (FMG)," 1988; 20(2):198.</p> <p>---. "FMJ 45 Long Colt/.410-Gauge Shotgun Model D Derringer," 1994; 26(2):144.</p> <p>---. "Haskell 45 ACP Semiautomatic Pistol," 1992; 24(1): 75.</p> <p>---. "Intratec Tec 22 Scorpion Pistol," 1990; 22(1): 51-54.</p> <p>---. "Parker 45 Semiautomatic Pistol," 1991; 23(3): 859-861.</p> <p>---. "380 Jennings Firearms Model 59," 1994; 26(2): 132-133.</p> <p>---. "9mm Lorcin Semiautomatic Pistol," 1995; 27(1) 8-10.</p> <p>Thompson, E., and Qanass, N., "9mm Danshway Semiautomatic Pistol," 1992; 24(3): 311-313.</p> <p>Vagnozzi, V., "Information on the M3 SMG Grease Gun," 1989; 21(1): 74.</p> <p>Vaughan, R.T., and Gilman, P.L., "Information of the Rogak LES P18 Pistol," 1985; 17(2):72.</p> <p>Whitemarsh, J.W., "Jennings Firearms Model J22 Semiautomatic Pistol," 1985; 17(2): 120.</p> <p>---. "Jennings Firearms Model J22 Semiautomatic Pistol Information," 1987; 19(1): 18.</p> <p>5.2.3 Videotapes</p> <p>American Gunsmithing Institute (AGI) Armorer's Course videotape series, including the following titles:</p> <p>Colt 1911 .45 Auto Pistol (111 min.)</p> <p>Remington 1100 Shotguns (120 min.)</p> <p>Browning Hi-Power Pistol (97 min.)</p> <p>Remington 870 Shotguns (95 min.)</p> <p>AR-15 Rifles (120 min.)</p> <p>Winchester 94 Rifles (120 min.)</p> <p>SKS Rifles (120 min.)</p>	

5 MANUFACTURE OF MODERN FIREARMS	Page 8 of 11
Division of Forensic Science FIREARM/TOOLMARK TRAINING MANUAL	Amendment Designator:
	Effective Date: 13 May 2003
<p>Ruger Standard Auto MKI/MKII (90 min)</p> <p>AKS/MAK 90 Type Rifles (91 min.)</p> <p>Ruger Mini-14 Rifles (90 min.)</p> <p>Glock 17,19,21,23 Pistols (60 min.)</p> <p>Makarov Pistols (60 min.)</p> <p>H&K Models 91, 93, 94 Rifles (60 min.)</p> <p>S&W, 1st, 2nd, 3rd, (Generation Pistols (105 min.)</p> <p>S&W Revolvers (120 min.)</p> <p>M1 Garand/M1A Rifles (90 min.)</p> <p>Ruger 10/22 Rifles (60 min.)</p> <p>Mossberg 500 Shotgun (90 min.)</p> <p>Beretta 92/Taurus P-92 Pistols (90 min.)</p> <p>M1/M2 .30 Carbine (90 min.)</p> <p>FN FAL Rifles (128 min.)</p> <p>Lenny Magill Productions "Bill Wilson Presents" videotapes series including the following titles:</p> <p>CZ-75 (72 min.)</p> <p>Sig Sauer P226 (74 min.)</p> <p>Lenny Magill productions videotapes under the following titles:</p> <p>Mastering the AR-15 (120 min.)</p> <p>Center X M1A/M14 (120 min.)</p> <p>Mastering Revolvers (70 min.)</p> <p>Rock'n Roll #1(45 min.)</p> <p>Complete Ruger P-Series (45 min.)</p> <p>Rock'n Roll #2 (50 min.)</p> <p>Complete Sigma (45 min.)</p> <p>U.S. Marines Firepower (75 min.)</p> <p>Complete Ruger .22 Pistol (67 min.)</p> <p>Mastering the Mini-Glock (110 min.)</p>	

5 MANUFACTURE OF MODERN FIREARMS	Page 9 of 11
Division of Forensic Science FIREARM/TOOLMARK TRAINING MANUAL	Amendment Designator:
	Effective Date: 13 May 2003
<p>U.S. Government training films converted to videotape and marketed by GunVideo, 4585 Murphy Canyon Road, San Diego, CA</p> <p>Thompson Sub-Machine Gun (97 min)</p> <p>Infantry Weapons and Their Effects (30 min.)</p> <p>Weapons of the Infantry (41 min.)</p> <p>Fundamentals of Small Arms (30 min.)</p> <p>Videotapes from other sources marketed by Lenny Magill Productions under the following titles:</p> <p>Firestorm (60 min.)Shooting the Uzi the Israeli Way (70 min.)</p> <p>Knob Creek Machine Gun Shoot (60 min.)</p> <p>The Colt M-16 Rifle (20 min.)</p> <p>Anite Productions, P.O. Box 375, Pinole, CA, videotapes under the following titles:</p> <p>Deadly Force (100 min.)</p> <p>Deadly Weapons (106 min.)</p> <p>Deadly Effects (60 min.)</p> <p>Dillon Productions, 8009 East Dillon's Way, Scottsdale, AZ. videotape:</p> <p>Firestorm in the Desert - Machine Gun Magic (117 min.)</p> <p>A & E Television Networks, 126 Fifth Avenue, New York, NY, videotape series:</p> <p>The Story of the Gun, Vol. I-IV (50 min. each volume)</p> <p>Magnum Research, Inc., 7110 University Avenue, N.E., Minneapolis, MN, videotape:</p> <p>Desert Eagle Pistol and Friends (20 min.)</p> <p>Anite Productions, P.O. Box 375, Pinole, CA, videotapes under the following titles:</p> <p>Deadly Force (100 min.)</p> <p>Deadly Weapons (106 min.)</p> <p>Deadly Effects (60 min.)</p> <p>Dillon Productions, 8009 East Dillon's Way, Scottsdale, AZ. videotape:</p> <p>Firestorm in the Desert - Machine Gun Magic (117 min.)</p> <p>A & E Television Networks, 126 Fifth Avenue, New York, NY, videotape series:</p> <p>The Story of the Gun, Vol. I-IV (50 min. each volume)</p>	

<p>5 MANUFACTURE OF MODERN FIREARMS</p>	<p>Page 10 of 11</p>
<p>Division of Forensic Science</p> <p>FIREARM/TOOLMARK TRAINING MANUAL</p>	<p>Amendment Designator:</p>
	<p>Effective Date: 13 May 2003</p>
<p>Magnum Research, Inc., 7110 University Avenue, N.E., Minneapolis, MN, videotape:</p> <p>Desert Eagle Pistol and Friends (20 min.)</p> <p>5.3 Reference Materials Manufacture of Modern Firearms</p> <p>5.3.1 Books</p> <p>Hatcher, J.S., Jury, F.J., and Weller, J., <u>Firearms Investigation, Identification and Evidence</u>, 2nd edition, Stackpole Books, Harrisburg, PA, 1957, Chapters 3-6.</p> <p>Herb, C.O., <u>Machine Tools at Work</u>, The Industrial Press, New York, 1942.</p> <p>"Machinery Handbook, 25th Edition"</p> <p>Mathews, J.H., <u>Firearms Identification</u>, Volume I, Charles C. Thomas, Springfield, IL, 1962, pp. 1-9.</p> <p>Moltrecht, K.H., <u>Machine Shop Practice Vol 1 & 2</u></p> <p>Oberg, Jones & Horton, <u>Machinist's Handbook Revised 21st Edition</u></p> <p>"Ruger Investment Casting (Company Brochure)"</p> <p>Steindler, <u>Firearms Dictionary</u></p> <p>5.3.2 Periodicals</p> <p>Bird, J., "How Handguns Are Made," <u>Handguns</u>, Feb. 1996, pp. 70-73.</p> <p>"Choke Tube Roundup!" <u>Guns & Ammo</u>, July 1994.</p> <p>Peterson, H.L., "The Development of Firearms," <u>American Rifleman</u>, Parts 3 and 4, May and Jun., 1960.</p> <p>Ruger Staff, "Ruger's Gun Talk - Rifled Barrels," <u>Guns and Ammo</u>, Mar. 1997.</p> <p>Sitton, G., "Blackstar Barrel Accurizing," <u>Guns and Ammo</u>, Aug. 1994.</p> <p>S & W Staff Report, "How S & W Builds Great Guns," <u>Smith & Wesson Handguns □96</u>, PJS Publications, Peoria, Il. 1996.</p> <p>Weller, J., "The Quiet Revolution in U.S. Firearms Manufacture, Part 1," <u>American Rifleman</u>, Jan. 1971.</p> <p>---. "The Quiet Revolution in U.S. Firearms Manufacture, Part 2 - Sporting Rifles," <u>American Rifleman</u>, Feb. 1971.</p> <p>---. "The Quiet Revolution in U.S. Firearms Manufacture, Part 3 - Shotguns," <u>American Rifleman</u>, Mar. 1971.</p> <p>---. "The Silent Revolution at Savage and Ithaca Gun Co.," <u>American Rifleman</u>, Nov. 1972.</p>	

5 MANUFACTURE OF MODERN FIREARMS	Page 11 of 11
<div> Division of Forensic Science </div> <div> FIREARM/TOOLMARK TRAINING MANUAL </div>	Amendment Designator:
	Effective Date: 13 May 2003
<div> <div>5.3.3 AFTE Journal</div> <div> <p>Ball,P., and Mikko,D., "Proofmarks," 1992; 24(1): 14-15.</p> <p>Biasotti, A. A., "Rifling Methods: Individual Characteristics Produced," 1981; 13(3):34.</p> <p>Chenow, R.W., and Lemmer, J.T., "Use of Investment Castings in the Manufacture of Firearm Components," 1994; 26(1):64-76.</p> <p>Goddard, C.H., "Proof Tests and Proof Marks," 1983; 15(2): 116-142.</p> <p>Haag, L.C., "Heckler & Koch Polygonal Rifling," 1977; 9(2):45-47.</p> <p>Harden, L.R., "Rohm Manufacturing Plant," 1978; 10(1):15.</p> <p>Lansing, J.F., "Electrochemical Machining: A New Barrel Making Process, Part 2, Testing the Coonan Arms Model B Pistol and the Reproducibility of Rifling Stria," 1988; 20(4): 396-403.</p> <p>Papke, R.E., "Electrochemical Machining: A New Barrel Making Process," 1988; 20(1): 48-52.</p> <p>Sugarman, L.A., "Eddy Manufacturing Co., Caliber .45 Auto Pistol," 1982; 14(1): 43.</p> <p>Swearngen, T.F., "Polygonal Rifling," 1973; 5(2): 32.</p> <p>Templin, R.H., "Manufacture of a M10 SMG Receiver," 1985; 17(2): 110.</p> </div> <div> <div>5.3.4 Videotapes</div> <div> <p>Shotguns in Valtrompia, How a Gun is Made (Com Nasce Un'Arma), Consorzio Armaioli Bresciani, Gardone Valtrompia, Italy, 1995 (English version).</p> </div> </div> <div>◆ End</div> </div>	